SEQUENCE LISTING

<110> Roche, Andrew
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Villsen, Inge D.
Schrotz-King, Petra
Henningsen, Jeannette
Lund Jorgensen, Trine Louise

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Thr Val Ala Ser Ala Leu Ala Leu Ala Pro Thr Ala Val Val Ala Arg
        35                  40                  45
Gln Gly Ala Ala Ala Phe Val Thr Val Asn Ser Ile Asp Val Cys Pro
    50                  55                  60
Lys Lys Val Ala Gln Glu Ile Ile Asn Pro Gly Pro Lys Val Val Thr
65                  70                  75                  80
Thr Pro Tyr Thr Cys Asp Gln Val Lys Leu Gly His Gly Leu Asp Val
                85                  90                  95
Ser Tyr Tyr Asn Phe Asp Ile Glu Pro Leu Thr Lys Asp Thr Phe Pro
            100                 105                 110
Tyr Cys Lys Ala Leu Lys Val Phe Asp Asn Glu Gly Cys Leu Gly Phe
        115                 120                 125
Pro Thr Leu Trp Ile Pro Leu Glu Ser Pro Leu Glu Asp Lys Cys Ile
    130                 135                 140
Pro Glu His Tyr Phe Ser Asp Glu Val Lys Ser Ile Ser Phe Gln Leu
145                 150                 155                 160
Asp Cys Arg Glu Asp Ala Pro Val Lys Lys Glu Pro Tyr Gly Pro Lys
                165                 170                 175
Glu Gly Ala Glu Gln Ser Ala Pro Gln Ala Glu His Ser Thr Lys Gln
            180                 185                 190
Asp Ala Gln Gln Gly Ser His Gln Gly Gln Glu Val Gln Asn Ser Pro
        195                 200                 205
Lys Gln Glu Ala Arg Gln Gly Ser Arg Pro Ala Glu Ala Ala Pro Lys
    210                 215                 220
Gln Glu Gln Glu Ala Glu Gln Ala Ser Glu Ala Ala Pro Glu Lys Lys
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35 40 45
Lys Asn Leu Ile Gly Gly Gly Ser Gly Thr Glu Gly Leu Gly Leu Phe
50 55 60
Asn Gln Cys Ser Lys Leu Asp Leu Gln Ser Pro Ile Ile Gly Ile Pro
65 70 75 80
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Gln Asn Ser Pro Ser Asp Ala Val Arg Phe Pro
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<213> Aspergillus Fumigatus

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20 25 30
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35 40 45
Asp Thr Thr His Gly Gln Phe Lys Gly Thr Ile Glu Thr Tyr Asp Gln
50 55 60
Gly Leu Ile Val Asn Gly Lys Lys Ile Arg Phe Tyr Ala Glu Lys Asp
65 70 75 80
Pro Ser Gln Ile Pro Trp Ser Glu Thr Gly Ala Ala Tyr Ile Val Glu
85 90 95
Ser Thr Gly Val Phe Thr Thr Lys Glu Lys Ala Ser Ala His Leu Lys
100 105 110
Gly Gly Ala Lys Lys Val Ile Ile Ser Ala Pro Ser Ala Asp Ala Pro
115 120 125
Met Phe Val Met Gly Val Asn Asn Thr Thr Tyr Thr Ser Asp Ile Gln
130 135 140
Val Leu Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu Ala
145 150 155 160
Lys Val Ile Asn Asp Lys Phe Gly Ile Val Glu Gly Leu Met Thr Thr
165 170 175
Val His Ser Tyr Thr Ala Thr Gln Lys Val Val Asp Ala Pro Ser Asn
180 185 190
Lys Asp Trp Arg Gly Gly Arg Thr Ala Ala Gln Asn Ile Ile Pro Ser
195 200 205

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Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Ser Leu Asn
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Gly Lys Leu Thr Gly Met Ala Met Arg Val Pro Thr Ser Asn Val Ser
225                 230                 235                 240
Val Val Asp Leu Thr Cys Arg Leu Glu Lys Gly Ala Ser Tyr Asp Glu
                245                 250                 255
Ile Lys Gln Ala Ile Lys Ala Ala Ser Glu Glu Gly Glu Leu Lys Asn
            260                 265                 270
Ile Leu Gly Tyr Thr Glu Asp Asp Val Val Ser Ser Asp Leu Asn Gly
        275                 280                 285
Asp Glu Arg Ser Ser Ile Phe Asp Ala Lys Ala Gly Ile Ser Leu Asn
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Pro Asn Phe Val Lys Leu Val Ala Trp Tyr Asp Asn Glu Trp
305                 310                 315
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            20                  25                  30
Ala Ile Val Pro Ser Gly Ala Ser Thr Gly Gln His Glu Ala His Glu
        35                  40                  45
Leu Arg Asp Gly Asp Lys Thr Gln Trp Gly Gly Lys Gly Val Leu Lys
    50                  55                  60
Ala Val Lys Asn Val Asn Glu Thr Ile Gly Pro Ala Leu Ile Lys Glu
65                  70                  75                  80
Asn Ile Asp Val Lys Asp Gln Ser Lys Val Asp Glu Phe Leu Asn Lys
                85                  90                  95
Leu Asp Gly Thr Ala Asn Lys Ser Asn Leu Gly Ala Asn Ala Ile Leu
            100                 105                 110
Gly Val Ser Leu Ala Val Ala Lys Ala Gly Ala Ala Glu Lys Gly Val
        115                 120                 125
Pro Leu Tyr Ala His Ile Ser Asp Leu Ala Gly Thr Lys Lys Pro Tyr
    130                 135                 140
Val Leu Pro Val Pro Phe Gln Asn Val Leu Asn Gly Gly Ser His Ala
145                 150                 155                 160
Gly Gly Arg Leu Ala Phe Gln Glu Phe Met Ile Val Pro Asp Ser Ala
                165                 170                 175
Pro Ser Phe Ser Glu Ala Leu Arg Gln Gly Ala Glu Val Tyr Gln Lys
            180                 185                 190
Leu Lys Ala Leu Ala Lys Lys Lys Tyr Gly Gln Ser Ala Gly Asn Val
        195                 200                 205
Gly Asp Glu Gly Gly Val Ala Pro Asp Ile Gln Thr Ala Glu Glu Ala
    210                 215                 220
Leu Asp Leu Ile Thr Glu Ala Ile Glu Gln Ala Gly Tyr Thr Gly Lys
225                 230                 235                 240
Ile Lys Ile Ala Met Asp Val Ala Ser Ser Glu Phe Tyr Lys Ala Asp
                245                 250                 255
Val Lys Lys Tyr Asp Leu Asp Phe Lys Asn Pro Glu Ser Asp Pro Ser
            260                 265                 270
Lys Trp Leu Thr Tyr Glu Gln Leu Ala Asp Leu Tyr Lys Ser Leu Ala
        275                 280                 285
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Ala Lys Tyr Pro Ile Val Ser Ile Glu Asp Pro Phe Ala Glu Asp Asp
    290                 295                 300
Trp Glu Ala Trp Ser Tyr Phe Tyr Lys Thr Ser Asp Phe Gln Ile Val
305                 310                 315                 320
Gly Asp Asp Leu Thr Val Thr Asn Pro Gly Arg Ile Lys Lys Ala Ile
                325                 330                 335
Glu Leu Lys Ser Cys Asn Ala Leu Leu Leu Lys Val Asn Gln Ile Gly
            340                 345                 350
Thr Leu Thr Glu Ser Ile Gln Ala Ala Lys Asp Ser Tyr Ala Asp Asn
        355                 360                 365
Trp Gly Val Met Val Ser His Arg Ser Gly Glu Thr Glu Asp Val Thr
    370                 375                 380
Ile Ala Asp Ile Ala Val Gly Leu Arg Ser Gly Gln Ile Lys Thr Gly
385                 390                 395                 400
Ala Pro Cys Arg Ser Glu Arg Leu Ala Lys Leu Asn Gln Ile Leu Arg
                405                 410                 415
Ile Glu Glu Glu Leu Gly Glu Asn Thr Val Tyr Ala Gly Ser Lys Phe
            420                 425                 430
Arg Thr Ala Val Asn Leu
        435
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            20                  25                  30
Gly Asp Ala Ala Ala Ala Thr Glu Glu Phe Leu Ser Gln Tyr Tyr Leu
        35                  40                  45
Asn Asp Asn Asp Ala Phe Met Thr Ser Asp Val Gly Gly Pro Ile Glu
    50                  55                  60
Asp Gln Asn Ser Leu Ser Ala Gly Glu Arg Gly Pro Thr Leu Leu Glu
65                  70                  75                  80
Asp Phe Ile Phe Arg Gln Lys Ile Gln Arg Phe Asp His Glu Arg Val
                85                  90                  95
Pro Glu Arg Ala Val His Ala Arg Gly Ala Gly Ala His Gly Val Phe
            100                 105                 110
Thr Ser Tyr Gly Asp Phe Ser Asn Ile Thr Ala Ala Ser Phe Leu Ala
        115                 120                 125
Lys Glu Gly Lys Gln Thr Pro Val Phe Val Arg Phe Ser Thr Val Ala
    130                 135                 140
Gly Ser Arg Gly Ser Ser Asp Leu Ala Arg Asp Val His Gly Phe Ala
145                 150                 155                 160
Thr Arg Phe Tyr Thr Asp Glu Gly Asn Phe Asp Ile Val Gly Asn Asn
                165                 170                 175
Ile Pro Val Phe Phe Ile Gln Asp Ala Ile Leu Phe Pro Asp Leu Ile
            180                 185                 190
His Ala Val Lys Pro Arg Gly Asp Asn Glu Ile Pro Gln Ala Ala Thr
        195                 200                 205
Ala His Asp Ser Ala Trp Asp Phe Phe Ser Gln Gln Pro Ser Thr Met
    210                 215                 220
His Thr Leu Leu Trp Ala Met Ser Gly His Gly Ile Pro Arg Ser Phe
225                 230                 235                 240
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Arg His Val Asp Gly Phe Gly Val His Thr Phe Arg Phe Val Thr Asp
                245                 250                 255
Asp Gly Ala Ser Lys Leu Val Lys Phe His Trp Lys Ser Leu Gln Gly
            260                 265                 270
Lys Ala Ser Met Val Trp Glu Glu Ala Gln Gln Thr Ser Gly Lys Asn
        275                 280                 285
Pro Asp Phe Met Arg Gln Asp Leu His Asp Ala Ile Glu Ala Gly Arg
    290                 295                 300
Tyr Pro Glu Trp Glu Leu Gly Val Gln Ile Met Asp Glu Glu Asp Gln
305                 310                 315                 320
Leu Arg Phe Gly Phe Asp Leu Leu Asp Pro Thr Lys Ile Val Pro Glu
                325                 330                 335
Glu Phe Val Pro Ile Thr Lys Leu Gly Lys Met Gln Leu Asn Arg Asn
            340                 345                 350
Pro Arg Asn Tyr Phe Ala Glu Thr Glu Gln Val Met Phe Gln Pro Gly
        355                 360                 365
His Ile Val Arg Gly Val Asp Phe Thr Glu Asp Pro Leu Leu Gln Gly
    370                 375                 380
Arg Leu Phe Ser Tyr Leu Asp Thr Gln Leu Asn Arg His Gly Gly Pro
385                 390                 395                 400
Asn Phe Glu Gln Leu Pro Ile Asn Gln Pro Arg Val Pro Val His Asn
                405                 410                 415
Asn Asn Arg Asp Gly Ala Gly Gln Met Phe Ile Pro Leu Asn Pro His
            420                 425                 430
Ala Tyr Ser Pro Lys Thr Ser Val Asn Gly Ser Pro Lys Gln Ala Asn
        435                 440                 445
Gln Thr Val Gly Asp Gly Phe Phe Thr Ala Pro Gly Arg Thr Thr Ser
    450                 455                 460
Gly Lys Leu Val Arg Ala Val Ser Ser Ser Phe Glu Asp Val Trp Ser
465                 470                 475                 480
Gln Pro Arg Leu Phe Tyr Asn Ser Leu Val Pro Ala Glu Lys Gln Phe
                485                 490                 495
Val Ile Asp Ala Ile Arg Phe Glu Asn Ala Asn Val Lys Ser Pro Val
            500                 505                 510
Val Lys Asn Asn Val Ile Ile Gln Leu Asn Arg Ile Asp Asn Asp Leu
        515                 520                 525
Ala Arg Arg Val Ala Arg Ala Ile Gly Val Ala Glu Pro Glu Pro Asp
    530                 535                 540
Pro Thr Phe Tyr His Asn Asn Lys Thr Ala Asp Val Gly Thr Phe Gly
545                 550                 555                 560
Thr Lys Leu Lys Lys Leu Asp Gly Leu Lys Val Gly Val Leu Gly Ser

                565                 570                 575
Val Gln His Pro Gly Ser Val Glu Gly Ala Ser Thr Leu Arg Asp Arg
            580                 585                 590
Leu Lys Asp Asp Gly Val Asp Val Val Leu Val Ala Glu Arg Leu Ala
        595                 600                 605
Asp Gly Val Asp Gln Thr Tyr Ser Thr Ser Asp Ala Ile Gln Phe Asp
    610                 615                 620
Ala Val Val Val Ala Ala Gly Ala Glu Ser Leu Phe Ala Ala Ser Ser
625                 630                 635                 640
Phe Thr Gly Gly Ser Ala Asn Ser Ala Ser Gly Ala Ser Ser Leu Tyr
                645                 650                 655
Pro Thr Gly Arg Pro Leu Gln Ile Leu Ile Asp Gly Phe Arg Phe Gly
            660                 665                 670
Lys Thr Val Gly Ala Leu Gly Ser Gly Thr Ala Ala Leu Arg Asn Ala
        675                 680                 685
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Gly Ile Ala Thr Ser Arg Asp Gly Val Tyr Val Ala Gln Ser Val Thr
    690                 695                 700
Asp Asp Phe Ala Asn Asp Leu Lys Glu Gly Leu Arg Thr Phe Lys Phe
705                 710                 715                 720
Leu Asp Arg Phe Pro Val Asp His
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            20                  25                  30
Thr Ala Asp Ala His Thr Gln Gln Pro Leu Thr Thr Asp His Gly Val
        35                  40                  45
Arg Val Ser Asn Thr Asp Gln Trp Leu Arg Val Thr Asn Asp Arg Arg
    50                  55                  60
Thr Gly Pro Ser Leu Leu Glu Asp Gln Ile Ala Arg Glu Lys Ile His
65                  70                  75                  80
Arg Phe Asp His Glu Arg Ile Pro Glu Arg Val Val His Ala Arg Gly
                85                  90                  95
Thr Gly Ala Phe Gly Asn Phe Lys Leu Lys Glu Ser Ile Glu Asp Leu
            100                 105                 110
Thr Tyr Ala Gly Val Leu Thr Asp Thr Ser Arg Asn Thr Pro Val Phe
        115                 120                 125
Val Arg Phe Ser Thr Val Gln Gly Ser Arg Gly Ser Ala Asp Thr Val
    130                 135                 140
Arg Asp Val Arg Gly Phe Ala Val Lys Phe Tyr Thr Asp Glu Gly Asn
145                 150                 155                 160
Trp Asp Ile Val Gly Asn Asn Ile Pro Val Phe Phe Ile Gln Asp Ala
                165                 170                 175
Val Lys Phe Pro Asp Phe Val His Ala Val Lys Pro Glu Pro His Asn
            180                 185                 190
Glu Val Pro Gln Ala Gln Thr Ala His Asn Asn Phe Trp Asp Phe Val
        195                 200                 205
Tyr Leu His Pro Glu Ala Thr His Met Phe Met Trp Ala Met Ser Asp
    210                 215                 220
Arg Ala Ile Pro Arg Ser Tyr Arg Met Met Gln Gly Phe Gly Val Asn
225                 230                 235                 240
Thr Phe Ala Leu Val Asn Lys Glu Gly Lys Arg His Phe Val Lys Phe
                245                 250                 255
His Trp Ile Pro His Leu Gly Val His Ser Leu Val Trp Asp Glu Ala
            260                 265                 270
Leu Lys Leu Gly Gly Gln Asp Pro Asp Phe His Arg Lys Asp Leu Met
        275                 280                 285
Glu Ala Ile Asp Asn Lys Ala Tyr Pro Lys Trp Asp Phe Ala Ile Gln
    290                 295                 300
Val Ile Pro Glu Glu Lys Gln Asp Asp Phe Glu Phe Asp Ile Leu Asp
305                 310                 315                 320
Ala Thr Lys Ile Trp Pro Glu Asn Leu Val Pro Leu Arg Val Ile Gly
                325                 330                 335
Glu Leu Glu Leu Asn Arg Asn Val Asp Glu Phe Phe Pro Gln Thr Glu
            340                 345                 350
```

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Gln Val Ala Phe Cys Thr Ser His Ile Val Pro Gly Ile Asp Phe Thr
        355                 360                 365
Asp Asp Pro Leu Leu Gln Gly Arg Asn Phe Ser Tyr Phe Asp Thr Gln
    370                 375                 380
Ile Ser Arg Leu Gly Ile Asn Trp Glu Glu Leu Pro Ile Asn Arg Pro
385                 390                 395                 400
Val Cys Pro Val Leu Asn His Asn Arg Asp Gly Gln Met Arg His Arg
                405                 410                 415
Ile Thr Gln Gly Thr Val Asn Tyr Trp Pro Asn Arg Phe Glu Ala Val
            420                 425                 430
Pro Pro Thr Gly Thr Lys Gly Ser Gly Val Gly Gly Gly Phe Thr Thr
        435                 440                 445
Tyr Pro Gln Arg Val Glu Gly Ile Lys Asn Arg Ala Leu Asn Asp Lys
    450                 455                 460
Phe Arg Glu His His Asn Gln Ala Gln Leu Phe Tyr Asn Ser Met Ser
465                 470                 475                 480
Glu His Glu Lys Leu His Met Lys Lys Ala Phe Ser Phe Glu Leu Asp
                485                 490                 495
His Cys Asp Asp Pro Thr Val Tyr Glu Arg Leu Ala Gly His Arg Leu
            500                 505                 510
Ala Glu Ile Asp Leu Glu Leu Ala Gln Lys Val Ala Glu Met Val Gly
        515                 520                 525
Ala Pro Ile Pro Ala Lys Ala Leu Lys Gln Asn His Gly Arg Arg Ala
    530                 535                 540
Pro His Leu Ser Gln Thr Glu Phe Ile Pro Lys Asn Pro Thr Ile Ala
545                 550                 555                 560
Ser Arg Arg Ile Ala Ile Ile Ile Gly Asp Gly Tyr Asp Pro Val Ala
                565                 570                 575
Ser Thr Gly Leu Lys Thr Ala Ile Lys Ala Ala Ser Ala Leu Pro Phe
            580                 585                 590
Ile Ile Gly Thr Lys Arg Ser Ala Ile Tyr Ala Thr Glu Asp Lys Thr
        595                 600                 605
Ser Ser Lys Gly Ile Ile Pro Asp His His Tyr Asp Gly Gln Arg Ser
    610                 615                 620
Thr Met Phe Asp Ala Thr Phe Ile Pro Gly Gly Pro His Val Ala Thr
625                 630                 635                 640
Leu Arg Gln Asn Gly Gln Ile Lys Tyr Trp Ile Ser Glu Thr Phe Gly
                645                 650                 655
His Leu Lys Ala Leu Gly Ala Thr Gly Glu Ala Val Asp Leu Val Lys
            660                 665                 670
Glu Thr Leu Ser Gly Thr Leu His Val Gln Val Ala Ser Ser Gln Ser
        675                 680                 685
Pro Glu Pro Val Glu Trp Tyr Gly Val Val Thr Ala Gly Gly Lys Gln
    690                 695                 700
Lys Pro Glu Ser Phe Lys Glu Ser Val Gln Ile Leu Lys Gly Ala Thr
705                 710                 715                 720
Asp Phe Val Gly Lys Phe Phe Tyr Gln Ile Ser Gln His Arg Asn Tyr
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Gln Arg Glu Leu Asp Gly Leu Ala Ser Thr Ile Ala Phe
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<212> PRT
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Lys Lys

<210> 13
<211> 17
<212> PRT
<213> Aspergillus Fumigatus

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 1   5   10   15
Asp

<210> 14
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Gly Arg

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<213> Aspergillus Fumigatus

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Lys Ile Val Pro
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<212> PRT
<213> Aspergillus Fumigatus

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 1   5   10   15

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 1   5   10

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 1   5   10   15

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 1   5   10

<210> 24
<211> 15
<212> PRT
<213> Aspergillus Fumigatus

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 1   5   10   15

<210> 25
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<213> Aspergillus Fumigatus

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 1   5   10

<210> 26
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 1   5   10

<210> 27
<211> 10
<212> PRT
<213> Aspergillus Fumigatus

<400> 27
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 1   5   10

<210> 28
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<400> 28
Ser Ile Ser Phe Gln Leu Asp Cys Arg
 1   5

<210> 29
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<213> Aspergillus Fumigatus

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 1   5   10   15

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Val Val Thr Thr Pro Tyr Thr Cys Asp Gln Val Lys
 1   5   10

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Val Pro Thr Ser Asn Val Ser Val Val Asp Leu Thr Cys Arg
 1   5   10

<210> 32
<211> 9
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 1   5

<210> 33
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 1   5   10   15

<210> 34
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 1   5   10

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 1   5   10   15
Ile Asn Asp Lys Phe Gly Ile Val Glu Gly Leu Met Thr Thr Val His
            20   25   30
Ser Tyr Thr Ala Thr Gln Lys Val Val Asp Ala Pro Ser Asn Lys Asp
        35   40   45
Trp Arg Gly Gly Arg Thr Ala Ala Gln Asn Ile Ile Pro Ser Ser Thr
    50   55   60
Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Ser Leu Asn Gly Lys
65   70   75   80
Leu Thr Gly Met Ala Met Arg Val Pro Thr Ser Asn Val Ser Val Val
                85   90   95
Asp Leu Thr Cys Arg Leu Glu Lys Gly Ala Ser Tyr Asp Glu Ile Lys
            100   105   110
Gln Ala Ile Lys Ala Ala Ser Glu Glu Gly Glu Leu Lys Asn Ile Leu
        115   120   125
Gly Tyr Thr Glu Asp Asp Val Val Ser Ser Asp Leu Asn Gly Asp Glu

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    130                 135                 140
Arg Ser Ser Ile Phe Asp Ala Lys Ala Gly Ile Ser Leu Asn Pro Asn
145                 150                 155                 160
Phe Val Lys Leu Val Ala Trp Tyr Asp Asn Glu Trp
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            20                  25                  30
Glu His Arg Lys Phe Asn Leu Arg Gln Glu Leu Ile Gly Gly Cys Ser
        35                  40                  45
Ile Asp Ala His Gly Lys Ser Val Thr Glu Glu Val Lys Lys Ala Ala
    50                  55                  60
Leu Glu Ser Asp Ala Val Leu Phe Ala Ala Val Gly Gly Pro Lys Trp
65                  70                  75                  80
Asp His Ile Arg Arg Gly Leu Asp Gly Pro Glu Gly Gly Leu Leu Gln
                85                  90                  95
Leu Arg Lys Ala Met Asp Ile Tyr Ala Asn Leu Arg Pro Cys Ser Ala
            100                 105                 110
Ser Ser Pro Ser Ala Ser Ile Ala Lys Glu Phe Ser Pro Phe Arg Gln
        115                 120                 125
Glu Val Ile Glu Gly Val Asp Phe Val Val Val Arg Glu Asn Cys Gly
    130                 135                 140
Gly Ala Tyr Phe Gly Lys Lys Ile Glu Glu Glu Asp Tyr Ala Met Asp
145                 150                 155                 160
Glu Trp Gly Tyr Ser Glu Arg Glu Ile Gln Arg Ile Thr Arg Leu Xaa
                165                 170                 175
Ala Glu Xaa Ala Leu Arg His Asn Pro Pro Trp Pro Val Ile Ser Leu
            180                 185                 190
Asp Lys Ala Asn Val Leu Ala Ser Ser Arg Leu Trp Arg Arg Val Val
        195                 200                 205
Glu Lys Thr Met Thr Thr Glu Tyr Pro Gln Val Lys Leu Val His Gln
    210                 215                 220
Leu Ala Asp Ser Ala Ser Leu Ile Leu Ala Thr Asn Pro Arg Ala Leu
225                 230                 235                 240
Asn Gly Val Ile Leu Ala Asp Asn Thr Phe Gly Asp Met Ile Ser Asp
                245                 250                 255
Gln Ala Gly Ser Ile Val Gly Thr Leu Gly Val Leu Pro Ser Ala Ser
            260                 265                 270
Leu Asp Gly Leu Pro Ser Glu Thr Arg Lys Arg Thr Asn Gly Leu Tyr
        275                 280                 285
Glu Pro Thr His Gly Ser Ala Pro Thr Ile Ala Gly Gln Asn Ile Ala
    290                 295                 300
Asn Pro Val Ala Met Ile Leu Cys Val Ala Leu Met Phe Arg Tyr Ser
305                 310                 315                 320
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Leu Asp Met Glu Thr Glu Ala Gln Arg Ile Glu Lys Ala Val Gln Gly
                325                 330                 335
Val Leu Asp Ala Gly Ile Arg Thr Pro Asp Leu Gly Gly Lys Ser Gly
            340                 345                 350
Thr Asn Glu Val Gly Asp Ala Ile Val Ala Ala Leu Gln Gly Ser Ser
        355                 360                 365
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<210> 37
<211> 8
<212> PRT
<213> Aspergillus Fumigatus

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa = Any Amino Acid

<400> 37
Leu Xaa Ala Glu Xaa Ala Leu Arg
1 5

<210> 38
<211> 1226
<212> DNA
<213> Aspergillus Fumigatus

<220>
<221> misc_feature
<222> (1)...(1226)
<223> n = A,T,C or G

<400> 38
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accgaagcgg tcaaggtgct aaaggtcttt gagaacgagc accgaaagtt caacctccgg 120
caagagctca tcggcggttg cagcatcgat gcgcacggaa aatccgtcac agaagaagtg 180
aaaaaggccg ctctggaatc cgacgccgtg ctcttcgcag cagtcggagg tcccaaatgg 240
gaccatatcc gtcgtggtct tgacgggccg gagggaggcc tgctgcagct ccgcaaggcg 300
atggacatct acgcgaatct caggccgtgc tcggccagtt cgccgagtgc gtcgatcgcg 360
aaggagttta gcccattccg ccaggaagtg atcgagggcg tagatttcgt cgtggtgagg 420
gagaactgcg ggggagcgta tttcgggaag aagatcgaag aagaagatta tggtacgtcg 480
tttttaacaa gcagtatgct ttcgagactg actgtgttat ttcagcgatg gacgaatggg 540
gctatagcga gcgcgagatc cagcgcatca cccgcctcnn ngcggaannn gccctccgtc 600
acaacccccc ctggcccgtc atctccctgg acaaagccaa tgtgctcgcc tcgtcgcggc 660
tctggcggcg cgtcgttgaa aagaccatga ccactgagta tccccaggtg aagctcgtgc 720
accagctggc agactcagca tcgctgattc tagcgaccaa cccgcgggca ttgaacggtg 780
tcatcttggc tgacaacaca ttcggcgaca tgatttctga ccaggccggt tccatcgtcg 840
ggacattggg cgtgcttccc agtgccagtc tcgatggact acccagtgaa acaagaaagc 900
ggacaaatgg tctgtacgag ccgacccatg gatctgcacc gacgtacgtt tcttcctttg 960
ttacccgaat tatcatgttt cactgaagca agctgacaat catctgcaga attgcgggcc 1020
agaacatcgc caaccccgtt gccatgatcc tctgtgtggc tctcatgttc cgctattcgc 1080
tagacatgga gaccgaggcg caacggatcg aaaaagcagt gcagggtgtt cttgatgccg 1140
ggatccgcac ccctgatctg ggtgggaaat cggggacgaa tgaagttggg gatgcaattg 1200
ttgctgcgtt gcagggtagt tcataa 1226

<210> 39
<211> 1107
<212> DNA

<213> Aspergillus Fumigatus

<220>
<221> misc_feature
<222> (1)....(1107)
<223> n = A,T,C or G

<400> 39
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accgaagcgg tcaaggtgct aaaggtcttt gagaacgagc accgaaagtt caacctccgg 120
caagagctca tcggcggttg cagcatcgat gcgcacggaa aatccgtcac agaagaagtg 180
aaaaaggccg ctctggaatc cgacgccgtg ctcttcgcag cagtcggagg tcccaaatgg 240
gaccatatcc gtcgtggtct tgacgggccg gagggaggcc tgctgcagct ccgcaaggcg 300
atggacatct acgcgaatct caggccgtgc tcggccagtt cgccgagtgc gtcgatcgcg 360
aaggagttta gcccattccg ccaggaagtg atcgagggcg tagatttcgt cgtggtgagg 420
gagaactgcg ggggagcgta tttcgggaag aagatcgaag aagaagatta tgcgatggac 480
gaatggggct atagcgagcg cgagatccag cgcatcaccc gcctcnnngc ggaannngcc 540
ctccgtcaca acccccccctg gcccgtcatc tccctggaca aagccaatgt gctcgcctcg 600
tcgcggctct ggcggcgcgt cgttgaaaag accatgacca ctgagtatcc ccaggtgaag 660
ctcgtgcacc agctggcaga ctcagcatcg ctgattctag cgaccaaccc gcgggcattg 720
aacggtgtca tcttggctga caacacattc ggcgacatga tttctgacca ggccggttcc 780
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agaaagcgga caaatggtct gtacgagccg acccatggat ctgcaccgac gattgcgggc 900
cagaacatcg ccaaccccgt tgccatgatc ctctgtgtgg ctctcatgtt ccgctattcg 960
ctagacatgg agaccgaggc gcaacggatc gaaaaagcag tgcagggtgt tcttgatgcc 1020
gggatccgca cccctgatct gggtgggaaa tcggggacga atgaagttgg ggatgcaatt 1080
gttgctgcgt tgcagggtag ttcataa 1107

<210> 40
<211> 1093
<212> DNA
<213> Aspergillus Fumigatus

<400> 40
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gtcctgcgcg tcatcgagaa gtgccgtgac gatgctacct tcaacctcca ggatcaattg 120
ctcggtggtg taagttcgat cgatgctacc ggatctcccc ttaccgacga agctcttaac 180
gccgcaaaga acgccgatgc cgttctcctc ggtgccattg gcggtcccaa atggggcact 240
ggcgccgtcc gccccgaaca gggcctcctc cgtctgcgca aggagatggg cacattcggt 300
aacctccgcc cctgcaactt cgccgccccg tcgctggtcg acggctcccc tctccgcccc 360
gaagtctgcc gcggcgtcga cttcaacatt atccgcgaac tgaccggtgg catctacttc 420
ggcgaccgca aggaggacga cggcagcggc ttcgccatgg acacggagcc gtactcccgc 480
gcggagatcg agcgcatcac ccgccttgcg gcccacctcg ctctgcagca caacccccct 540
cttcccgtgt ggagcttgga caaggccaac gtcctcgcga cgagccggct gtggcggaag 600
accgtgacgg aggtcatggc caaggagttc ccccagctca aggtggagca ccagctcatt 660
gactccgcgg ccatgatcat ggtcaaggag cctagaaagc ttaacggtat tgttgtcact 720
agcaacctgt tcggtgacat catcagtgat gaagccagcg ttatccctgg ttctctggga 780
ctcttgccca gcgcaagctt gagcggcatt cctgacggaa agaccaaggt caatggtatc 840
tatgagccta ttcacggttc tgcccctgac attgccggca agggcatcgt taaccccgtc 900
gccgccattc tctctgtcgc catgatgatg cagtactccc tgaaccgtat ggatgacgcc 960
agggccatcg agacggccgt ccgcaatgtg atcgaggccg gtatccgcac tgccgatatt 1020
ggcggcaagt cgacaactag cgaggtcggt gacgctgttg ctgccgagct ggagaagctg 1080
ttgaagcaat agt 1093

<210> 41
<211> 363
<212> PRT

<213> Aspergillus Fumigatus

<400> 41

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 1               5                  10                  15
Glu Val Ser Ser Val Leu Arg Val Ile Glu Lys Cys Arg Asp Asp Ala
            20                  25                  30
Thr Phe Asn Leu Gln Asp Gln Leu Leu Gly Gly Val Ser Ser Ile Asp
        35                  40                  45
Ala Thr Gly Ser Pro Leu Thr Asp Glu Ala Leu Asn Ala Ala Lys Asn
    50                  55                  60
Ala Asp Ala Val Leu Leu Gly Ala Ile Gly Gly Pro Lys Trp Gly Thr
65                  70                  75                  80
Gly Ala Val Arg Pro Glu Gln Gly Leu Leu Arg Leu Arg Lys Glu Met
                85                  90                  95
Gly Thr Phe Gly Asn Leu Arg Pro Cys Asn Phe Ala Ala Pro Ser Leu
            100                 105                 110
Val Asp Gly Ser Pro Leu Arg Pro Glu Val Cys Arg Gly Val Asp Phe
        115                 120                 125
Asn Ile Ile Arg Glu Leu Thr Gly Gly Ile Tyr Phe Gly Asp Arg Lys
    130                 135                 140
Glu Asp Asp Gly Ser Gly Phe Ala Met Asp Thr Glu Pro Tyr Ser Arg
145                 150                 155                 160
Ala Glu Ile Glu Arg Ile Thr Arg Leu Ala Ala His Leu Ala Leu Gln
                165                 170                 175
His Asn Pro Pro Leu Pro Val Trp Ser Leu Asp Lys Ala Asn Val Leu
            180                 185                 190
Ala Thr Ser Arg Leu Trp Arg Lys Thr Val Thr Glu Val Met Ala Lys
        195                 200                 205
Glu Phe Pro Gln Leu Lys Val Glu His Gln Leu Ile Asp Ser Ala Ala
    210                 215                 220
Met Ile Met Val Lys Glu Pro Arg Lys Leu Asn Gly Ile Val Val Thr
225                 230                 235                 240
Ser Asn Leu Phe Gly Asp Ile Ile Ser Asp Glu Ala Ser Val Ile Pro
                245                 250                 255
Gly Ser Leu Gly Leu Leu Pro Ser Ala Ser Leu Ser Gly Ile Pro Asp
            260                 265                 270
Gly Lys Thr Lys Val Asn Gly Ile Tyr Glu Pro Ile His Gly Ser Ala
        275                 280                 285
Pro Asp Ile Ala Gly Lys Gly Ile Val Asn Pro Val Ala Ala Ile Leu
    290                 295                 300
Ser Val Ala Met Met Met Gln Tyr Ser Leu Asn Arg Met Asp Asp Ala
305                 310                 315                 320
Arg Ala Ile Glu Thr Ala Val Arg Asn Val Ile Glu Ala Gly Ile Arg

                325                 330                 335
Thr Ala Asp Ile Gly Gly Lys Ser Thr Thr Ser Glu Val Gly Asp Ala
            340                 345                 350
Val Ala Ala Glu Leu Glu Lys Leu Leu Lys Gln
        355                 360
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<210> 42
<211> 18
<212> DNA
<213> Aspergillus Fumigatus

<400> 42

atgcctatct ccaagatc 18

<210> 43
<211> 15
<212> DNA
<213> Aspergillus Fumigatus

<400> 43
caggttgacg gcagt 15

<210> 44
<211> 18
<212> DNA
<213> Aspergillus Fumigatus

<400> 44
atggtaacta cttacaac 18

<210> 45
<211> 18
<212> DNA
<213> Aspergillus Fumigatus

<400> 45
tgaactaccc tgcaacgc 18

<210> 46
<211> 1233
<212> DNA
<213> Aspergillus Fumigatus

<400> 46
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atcctcgtcc tccccggcga tgggatcggt cccgaggtca tgaccgaagc ggtcaaggtg 120
ctaaaggtct ttgagaacga gcaccgaaag ttcaacctcc ggcaagagct catcggcggt 180
tgcagcatcg atgcgcacgg aaaatccgtc acagaagaag tgaaaaaggc cgctctggaa 240
tccgacgccg tgctcttcgc agcagtcgga ggtcccaaat gggaccatat ccgtcgtggt 300
cttgacgggc cggagggagg cctgctgcag ctccgcaagg cgatggacat ctacgcgaat 360
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cgccaggaag tgatcgaggg cgtagatttc gtcgtggtga gggagaactg cgggggagcg 480
tatttcggga agaagatcga agaagaagat tatgcgatgg acgaatgggg ctatagcgag 540
cgcgagatcc agcgcatcac ccgcctctcg gcggaaattg ccctccgtca caacccccc 600
tggcccgtca tctccctgga caaagccaat gtgctcgcct cgtcgcggct ctggcggcgc 660
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gacaacacat tcggcgacat gatttctgac caggccggtt ccatcgtcgg gacattgggc 840
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gcgcaacgga tcgaaaaagc agtgcagggt gttcttgatg ccgggatccg caccctgat 1080
ctgggtggga aatcggggac gaatgaagtt ggggatgcaa ttgttgctgc gttgcagggt 1140
agttcaaagg gcgagcttga aggtaagcct atccctaacc ctctcctcgg tctcgattct 1200
acgcgtaccg gtcatcatca ccatcaccat tga 1233

<210> 47
<211> 410
<212> PRT

<213> Aspergillus Fumigatus

<400> 47

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            20                  25                  30
Val Met Thr Glu Ala Val Lys Val Leu Lys Val Phe Glu Asn Glu His
        35                  40                  45
Arg Lys Phe Asn Leu Arg Gln Glu Leu Ile Gly Gly Cys Ser Ile Asp
    50                  55                  60
Ala His Gly Lys Ser Val Thr Glu Glu Val Lys Lys Ala Ala Leu Glu
65                  70                  75                  80
Ser Asp Ala Val Leu Phe Ala Ala Val Gly Gly Pro Lys Trp Asp His
                85                  90                  95
Ile Arg Arg Gly Leu Asp Gly Pro Glu Gly Gly Leu Leu Gln Leu Arg
            100                 105                 110
Lys Ala Met Asp Ile Tyr Ala Asn Leu Arg Pro Cys Ser Ala Ser Ser
        115                 120                 125
Pro Ser Ala Ser Ile Ala Lys Glu Phe Ser Pro Phe Arg Gln Glu Val
    130                 135                 140
Ile Glu Gly Val Asp Phe Val Val Val Arg Glu Asn Cys Gly Gly Ala
145                 150                 155                 160
Tyr Phe Gly Lys Lys Ile Glu Glu Glu Asp Tyr Ala Met Asp Glu Trp
                165                 170                 175
Gly Tyr Ser Glu Arg Glu Ile Gln Arg Ile Thr Arg Leu Ser Ala Glu
            180                 185                 190
Ile Ala Leu Arg His Asn Pro Pro Trp Pro Val Ile Ser Leu Asp Lys
        195                 200                 205
Ala Asn Val Leu Ala Ser Ser Arg Leu Trp Arg Arg Val Val Glu Lys
    210                 215                 220
Thr Met Thr Thr Glu Tyr Pro Gln Val Lys Leu Val His Gln Leu Ala
225                 230                 235                 240
Asp Ser Ala Ser Leu Ile Leu Ala Thr Asn Pro Arg Ala Leu Asn Gly
                245                 250                 255
Val Ile Leu Ala Asp Asn Thr Phe Gly Asp Met Ile Ser Asp Gln Ala
            260                 265                 270
Gly Ser Ile Val Gly Thr Leu Gly Val Leu Pro Ser Ala Ser Leu Asp
        275                 280                 285
Gly Leu Pro Ser Glu Thr Arg Lys Arg Thr Asn Gly Leu Tyr Glu Pro
    290                 295                 300
Thr His Gly Ser Ala Pro Thr Ile Ala Gly Gln Asn Ile Ala Asn Pro
305                 310                 315                 320
Val Ala Met Ile Leu Cys Val Ala Leu Met Phe Arg Tyr Ser Leu Asp
                325                 330                 335
Met Glu Thr Glu Ala Gln Arg Ile Glu Lys Ala Val Gln Gly Val Leu
            340                 345                 350
Asp Ala Gly Ile Arg Thr Pro Asp Leu Gly Gly Lys Ser Gly Thr Asn
        355                 360                 365
Glu Val Gly Asp Ala Ile Val Ala Ala Leu Gln Gly Ser Ser Lys Gly
    370                 375                 380
Glu Leu Glu Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser
385                 390                 395                 400
Thr Arg Thr Gly His His His His His His
                405                 410
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<210> 48

<211> 1443
<212> DNA
<213> Aspergillus Fumigatus

<400> 48
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gagaccggtt tgcaccgtgc tattgttcct tctggagctt ccaccggcca gcacgaggct 180
cacgagctcc gtgacggtga taagacccag tggggcggca agggtgtcct caaggctgtc 240
aagaatgtca acgagaccat tggccctgct ctcatcaagg agaacatcga tgtgaaggac 300
cagtctaagg tcgacgagtt ccttaacaag cttgacggga ctgccaacaa gtccaacctc 360
ggtgctaatg ccatcctcgg tgtcagcttg gctgttgcca aggctggtgc tgctgagaag 420
ggtgtccctc tctacgctca catctccgac cttgccggta ccaagaagcc ctatgtcctt 480
cccgttccct tccagaacgt cctgaacggc ggctctcacg ccggtggtcg cctcgctttc 540
caggagttca tgatcgtccc tgactccgct ccctctttct ccgaggccct ccgccagggt 600
gctgaggtct accagaagct caaggctctg gccaagaaga agtacggcca gtccgctggc 660
aacgttggtg acgagggtgg tgttgctccc gatattcaga ccgccgagga ggctctcgac 720
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gttgcctcca gcgagttcta caaggccgac gtcaagaagt acgaccttga cttcaagaac 840
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cttgctgcca agtaccccat tgtcagcatt gaggaccct tcgctgagga tgattgggag 960
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actaaccctg ggcgtatcaa gaaggccatc gagctcaagt cctgcaacgc cctcctgctc 1080
aaggtcaacc agatcggtac cctcaccgag tccatccagg ccgccaagga ctcctacgcc 1140
gacaactggg gtgtcatggt ctcccaccgc tctggtgaga ctgaggacgt caccattgcc 1200
gacattgctg tcggtctgcg ctctggccag atcaagaccg gtgctccttg ccgttccgag 1260
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tacgctggtt ccaagttccg cactgccgtc aacctgaagg gcgagcttga aggtaagcct 1380
atccctaacc ctctcctcgg tctcgattct acgcgtaccg gtcatcatca ccatcaccat 1440
tga 1443

<210> 49
<211> 480
<212> PRT
<213> Aspergillus Fumigatus

<400> 49
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Ile Ser Lys Ile His Ala Arg Ser Val Tyr Asp Ser Arg Gly Asn Pro
            20   25   30
Thr Val Glu Val Asp Val Val Thr Glu Thr Gly Leu His Arg Ala Ile
        35   40   45
Val Pro Ser Gly Ala Ser Thr Gly Gln His Glu Ala His Glu Leu Arg
    50   55   60
Asp Gly Asp Lys Thr Gln Trp Gly Gly Lys Gly Val Leu Lys Ala Val
65   70   75   80
Lys Asn Val Asn Glu Thr Ile Gly Pro Ala Leu Ile Lys Glu Asn Ile
                85   90   95
Asp Val Lys Asp Gln Ser Lys Val Asp Glu Phe Leu Asn Lys Leu Asp
            100   105   110
Gly Thr Ala Asn Lys Ser Asn Leu Gly Ala Asn Ala Ile Leu Gly Val
        115   120   125
Ser Leu Ala Val Ala Lys Ala Gly Ala Ala Glu Lys Gly Val Pro Leu
    130   135   140
Tyr Ala His Ile Ser Asp Leu Ala Gly Thr Lys Lys Pro Tyr Val Leu
145   150   155   160

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Pro Val Pro Phe Gln Asn Val Leu Asn Gly Gly Ser His Ala Gly Gly
                165                 170                 175
Arg Leu Ala Phe Gln Glu Phe Met Ile Val Pro Asp Ser Ala Pro Ser
            180                 185                 190
Phe Ser Glu Ala Leu Arg Gln Gly Ala Glu Val Tyr Gln Lys Leu Lys
        195                 200                 205
Ala Leu Ala Lys Lys Lys Tyr Gly Gln Ser Ala Gly Asn Val Gly Asp
    210                 215                 220
Glu Gly Gly Val Ala Pro Asp Ile Gln Thr Ala Glu Glu Ala Leu Asp
225                 230                 235                 240
Leu Ile Thr Glu Ala Ile Glu Gln Ala Gly Tyr Thr Gly Lys Ile Lys
                245                 250                 255
Ile Ala Met Asp Val Ala Ser Ser Glu Phe Tyr Lys Ala Asp Val Lys
            260                 265                 270
Lys Tyr Asp Leu Asp Phe Lys Asn Pro Glu Ser Asp Pro Ser Lys Trp
        275                 280                 285
Leu Thr Tyr Glu Gln Leu Ala Asp Leu Tyr Lys Ser Leu Ala Ala Lys
    290                 295                 300
Tyr Pro Ile Val Ser Ile Glu Asp Pro Phe Ala Glu Asp Asp Trp Glu
305                 310                 315                 320
Ala Trp Ser Tyr Phe Tyr Lys Thr Ser Asp Phe Gln Ile Val Gly Asp
                325                 330                 335
Asp Leu Thr Val Thr Asn Pro Gly Arg Ile Lys Lys Ala Ile Glu Leu
            340                 345                 350
Lys Ser Cys Asn Ala Leu Leu Leu Lys Val Asn Gln Ile Gly Thr Leu
        355                 360                 365
Thr Glu Ser Ile Gln Ala Ala Lys Asp Ser Tyr Ala Asp Asn Trp Gly
    370                 375                 380
Val Met Val Ser His Arg Ser Gly Glu Thr Glu Asp Val Thr Ile Ala
385                 390                 395                 400
Asp Ile Ala Val Gly Leu Arg Ser Gly Gln Ile Lys Thr Gly Ala Pro
                405                 410                 415
Cys Arg Ser Glu Arg Leu Ala Lys Leu Asn Gln Ile Leu Arg Ile Glu
            420                 425                 430
Glu Glu Leu Gly Glu Asn Ala Val Tyr Ala Gly Ser Lys Phe Arg Thr
        435                 440                 445
Ala Val Asn Leu Lys Gly Glu Leu Glu Gly Lys Pro Ile Pro Asn Pro
    450                 455                 460
Leu Leu Gly Leu Asp Ser Thr Arg Thr Gly His His His His His His
465                 470                 475                 480
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